PERMIT TO OPERATE

Number 01399

Valid July 1, 2000 to June 30, 2001

This Permit Has Been Issued To The Following:

Company Name / Address:

Facility Name / Address:

Ventura Regional San. District 1001 Partridge Dr. Suite 150 Ventura, CA 93003

VRSD Oxnard Landfills Bailard/Coastal/Santa Clara Oxnard, CA 93030

Permission Is Hereby Granted To Operate The Following:

Landfill Gas Collection and Destruction System, including gas wells and piping, from the Santa Clara, Coastal, and Bailard Landfills

2 - 40.5 MMBTU/hr Enclosed ground level Sur-Lite landfill Flares (Gas Flare Nos. 1 and 2), Model Sacramento, 1500 SCFM capacity, each equipped with a temperature recorder/controller, automatic combustion air dampers, landfill gas flow meter, and a landfill gas particulate scrubber

This Permit Has Been Issued Subject To The Following Conditions:

1.	Permitted Emissions	Tons/Year	Pounds/Hour
	Reactive Organics	13.97	3.18
	Nitrogen Oxides	21.33	4.86
	Particulate Matter	15.64	3.56
	Sulfur Oxides	3.56	0.81
	Carbon Monoxide	71.10	16.20

2. The annual landfill gas consumption at the landfill gas flares shall not exceed 711,000 million BTU.

In order to comply with this condition, the permittee shall maintain daily records and monthly reports of landfill gas consumption as required by Condition No. 15. The monthly fuel record totals for any of these 12 month periods in excess of the specified limits shall be considered a violation of this condition. Before exceeding these limits, permittee shall submit an application to modify this condition.

- 3. Landfill Gas Flare Emission Limits:
 - a) Each landfill gas flare shall be maintained at a minimum temperature of 1500 degrees Fahrenheit as indicated by the flare temperature recorder. This requirement shall not apply during the first fifteen (15) minutes of a flare startup. This condition is applied as Best Available Control Technology (BACT) for reactive organic compounds (ROC).

- b) Each landfill gas flare shall be maintained and operated with a non-methane organic compound (NMOC) destruction efficiency of 90 percent by weight, or greater; or the outlet NMOC concentration shall not exceed 30 ppmvd measured as methane corrected to three (3) percent oxygen. This condition is applied in order to comply with APCD Rule 74.17, Solid Waste Disposal Sites.
- c) Emissions of reactive organic compounds (ROC) from each landfill gas flare shall not exceed 1.59 pounds per hour. This condition is applied as Best Available Control Technology (BACT) for reactive organic compounds (ROC). For the purpose of this condition, ROC is assumed equal to NMOC.
- d) Emissions of oxides of nitrogen (NOx measured as NO2) from each landfill gas flare shall not exceed 0.06 pounds per million BTUs of heat input. This condition is applied as Best Available Control Technology (BACT) for oxides of nitrogen (NOx) and as Rule 74.17.C.3.b compliance.
- e) Emissions of oxides of nitrogen (NOx measured as NO2) from each landfill gas flare shall not exceed 2.43 pounds per hour. This condition is applied as Best Available Control Technology (BACT) for oxides of nitrogen (NOx).
- f) Emissions of carbon monoxide (CO) from each landfill gas flare shall not exceed 0.20 pounds per million BTUs of heat input. This condition is applied as Rule 74.17.C.3.c compliance.

In order to comply with this condition, Ventura Regional Sanitation District shall maintain the flare temperature indicators and recorders as required by Condition No. 5 and shall perform source testing as required by Condition No. 6. Failure to meet the above limits as indicated by the flare temperature recorders or source testing shall be considered to be a violation of this condition.

- 4. The permittee shall comply with all applicable requirements of APCD Rule 74.17, "Solid Waste Disposal Sites", and Rule 74.17.1, "Municipal Solid Waste Landfills". As detailed in Rule 74.17.F.3, Rule 74.17 shall no longer apply to any solid waste disposal site that has satisfied the requirements of Rule 74.17.1.H and demonstrated compliance with the requirements of Rule 74.17.1.B.
- 5. Ventura Regional Sanitation District shall properly maintain and operate a landfill gas flare temperature controller at each flare. The temperature controllers shall include a thermocouple temperature indicator and a continuous temperature recorder.
- 6. An annual source test shall be performed on each of the landfill gas flares to verify compliance with Condition No. 3. A source test protocol shall be submitted to the APCD Enforcement Section at least 45 days prior to the test. The APCD Enforcement Section

shall be notified of the source test date within five working days of the planned test and shall be allowed to observe the test. Source testing methods are detailed in Condition Nos. 7 and 8 and APCD Rule 74.17.

- 7. The following test methods shall be conducted for the source testing required by Condition No. 6:
 - a) Oxides of Nitrogen....Rule 74.17.H.6 (includes EPA Method 7E)
 - b) Stack Gas Oxygen.....EPA Method 3A
 - c) Carbon Monoxide.....Rule 74.17.H.6 (includes EPA Method 10)
 - d) NMOC Destruction Efficiency....Rule 74.17.H.4
 - e) NMOC Concentration...EPA Method 25 Modified (Rule 74.17.H.5.a)
 - f) Inlet and Exhaust Flow Rate.... EPA Method 2 or Rule 74.17.H.4
 - g) Gross Calorific Value......ASTM D1826-77
- 8. The results of the source test Required by Condition No. 6 shall be submitted to the APCD Enforcement Section within 45 days of the source test date. The report shall include the following data:
 - a) NMOC destruction/treatment efficiency as determined using the method described in Rule 74.17.H.4 and the NMOC exhaust concentration in ppmvd as methane corrected to 3 percent oxygen as determined using the method described in Rule 74.17.H.5.a;
 - b) Emission of NOx and CO in pounds per million BTU as determined using the method described in Rule 74.17.H.6, including the emission concentrations (ppmvd) and the gross calorific value (BTU/cf) of the landfill gas;
 - c) Emissions of NOx and NMOC in pounds per hour;
 - d) A brief description of the test equipment, test and calibration procedures, and a copy of the raw data collected during the test.
- 9. Pursuant to District Rule 54, "Sulfur Compounds", sulfur oxides (SOx measured as SO2) from the flares shall not exceed 300 ppmv. Compliance with this condition shall be verified by source testing at each flare every four years as required by Condition No. 13.
- 10. Compliance with the following conditions is required to insure that raw landfill gas is not released to the atmosphere:
 - a) If Ogden Pacific Power Inc. (Permit to Operate No. 1210) cannot consume all the landfill gas produced and it is necessary to shutdown one or both flares for regularly scheduled maintenance, the permittee shall notify the VCAPCD Enforcement Section. A written notification at least 24 hours in advance is required for shutdown periods in excess of 8 consecutive hours. If the shutdown exceeds 8 hours in length, a written report shall follow within 5 working days describing the reason and the duration of maintenance.

- b) The landfill gas collection system shall be isolated by the use of valves and/or blind flanges during a maintenance shutdown to eliminate the emission of raw landfill gas to the atmosphere. The gas collection system shall remain isolated during maintenance activities unless the collected gas is burned in an alternate fuel burning device permitted by the VCAPCD.
- 11. Specific instrumentation used for the control and recording of gas flow, and the exhaust temperature of the flare system shall be calibrated annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications. Safety equipment that protects the landfill gas collection system, condensate system, and flares including the flame detector, high temperature shutdown, landfill gas blower control, and air damper shall be calibrated or function-checked annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications or continue to operate as required. checks shall be performed in accordance with manufacturer's specifications or, if non-specified, in accordance with acceptable industrial practices. All records of third party calibrations of the gas flow and stack temperature recording devices shall be kept in three-ring binders identifying the contracting company, technician's name and title, date of calibration and a list of calibration techniques. Comments such as, "acceptable as tested", "adjusted", "repaired", or "replaced", shall be so noted on the calibration report. All automatic shutdown and safety equipment for the landfill gas collection system, condensate system, and flares may be function-tested by the operator or their representatives as long as the employee's name, date of test, and comments are recorded in the landfill gas flare operations log All other associated gauges, thermometers, and meters not required to ensure operational compliance with this Permit to Operate or VCAPCD Rules and Regulations need not be annually inspected or calibrated.
- 12. The flares shall be equipped with controllers that monitor for flame failure. This failure shall initiate isolation of the flare from the landfill gas supply line by closing the isolation valve. Upon closing of the isolation valve, an alarm shall be activated to notify the operator of a system malfunction. If such failure occurs, the system shall automatically attempt to relight the flare. If the automatic relighting occurs, the isolation valve shall reopen to continue destruction of the landfill gas.
- 13. Prior to November 1, 1997 and every four years thereafter, the landfill gas and each landfill gas flare exhaust shall be tested to determine the actual concentrations, by weight, of the toxic/hazardous substances for which carcinogenic unit risk factors have been developed by the Cal EPA Office of Environmental Health Hazard Assessment or the Environmental Protection Agency and substances listed by the California Air Resources Board pursuant to Section 44321 of the California Health and Safety Code (AB 2588)

List of Substances). In addition, the analysis will determine the reactive organic compound (as defined in APCD Rule 2) content in percent by weight in the landfill gas and flare exhaust; and the total reduced sulfur compounds calculated as sulfur dioxide in parts per million by volume, sulfur compounds in grains per 100 cubic feet, and the higher heating value of the landfill gas in BTUs per cubic foot and BTUs per pound. Analysis for any compound listed or referenced above which can be demonstrated as not being contained in the landfill gas and/or flare exhaust gas may be requested for removal from the required list, subject to APCD approval. The APCD shall be given the opportunity, with sufficient notice, to observe the emissions testing.

A source test plan for complying with the above outlined testing shall be submitted 45 days prior to the test for APCD approval. The test plan shall include, but not be limited to, a discussion of sampling methods, test date, analytical methods, test equipment inventory, and calibration procedures.

Within 45 days after completion of an emissions test, a test report shall be submitted to the APCD detailing the test procedures, quality assurance procedures, and the results of the tests as described above.

14. If an analysis of a source test indicates that the concentrations of the toxic contaminants are significantly higher than those toxic contaminants considered in the risk assessment prior to the installation of the gas collection and flare system, then a new screening health risk assessment shall be prepared and submitted within 60 days of the date the test results are available. If this second health risk assessment shows excess cancer risks greater than one in a million to the maximum exposed individual, then a more detailed risk analysis that shows acceptable risk levels based on new data will be prepared and submitted within 90 days of the date the test results are available.

If appropriate, an alternate mitigation measure may be to apply for an Authority to Construct, within 120 days of the date that the results of the second health risk analysis are available, for modifications to the system that adequately reduce the emission—impact to acceptable levels. A new health risk assessment which demonstrates the acceptable risk levels shall accompany the Authority to Construct application.

- 15. Ventura Regional Sanitation District shall record and maintain the following information. This data shall be maintained for a minimum of two years from the date of each entry and made available to the APCD upon request:
 - a) Records of the amount of landfill gas consumed (in MMBTU) in the landfill gas flares on a daily basis. At the end of each month, the daily records shall be compiled into a monthly report. These records shall include the fuel flow rate and fuel

heating value.

- b) The flare temperature records as required by Condition No. 5.
- c) Records of the flare system's testing and calibration activities as required by Condition No. 11.
- d) Copies of the source tests as required by Condition Nos. 6 and 13.

Within 10 days after receipt of this permit, the permittee may petition the Hearing Board to review any new or modified condition (Rule 22).

This permit, or a copy, shall be posted reasonably close to the subject equipment and shall be accessible to inspection personnel (Rule 19). This permit is not transferable from one location to another unless the equipment is specifically listed as being portable (Rule 20).

This Permit to Operate shall not be construed to allow any emission unit to operate in violation of any state or federal emission standard or any rule of the District.

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Karl E. Krause, Manager Engineering Section For:

Richard H. Baldwin Air Pollution Control Officer